

Appln. No.: 10/736,280
Docket No.: H1823-00004
Reply to Office Action dated January 7, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An electrical contact comprising a plurality of interlaced, annealed, and unsupported wires.
2. (Original) An electrical contact according to claim 1 wherein said plurality of interlaced and annealed wires comprise a woven and annealed structure that provides a plurality of individual beam-sections.
3. (Original) An electrical contact according to claim 1 wherein said plurality of interlaced and annealed wires comprise at least three discrete wires that have been manipulated together so as to interlace them to form a unitary structure.
4. (Original) An electrical contact according to claim 1 wherein said plurality of interlaced and annealed wires comprise eight discrete wires that have been manipulated together so as to interlace them to form a unitary structure.

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5. (Original) An electrical contact according to claim 1 wherein said plurality of interlaced and annealed wires comprise at least three discrete wires that have been manipulated together so as to interlace them to form a unitary tubular structure without a central support structure around which said wires are wound.

6. (Original) An electrical contact according to claim 1 wherein said plurality of interlaced and annealed wires comprise at least three discrete wires that have been manipulated together so as to interlace them to form a unitary tubular structure without at least one of an outer and inner support structure.

7. (Original) An electrical contact according to claim 4 wherein each of said plurality of interlaced and annealed wires comprise eight discrete wires that have been helically manipulated together so as to interlace them to form a unitary structure.

8. (Original) An electrical contact according to claim 7 wherein each of said plurality of interlaced and annealed wires define a plurality of intersection/overlap points.

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9. (Original) An electrical contact according to claim 8 wherein the portions of each wire that define each of said intersection/overlap points are movable relative to one another.

10. (Original) An electrical contact according to claim 8 wherein said plurality of interlaced and annealed wires comprise a strain relief at said plurality of intersection/overlap points.

11. (Original) An electrical contact according to claim 8 wherein said plurality of interlaced and annealed wires comprise at least one of a copper alloy and stainless steel.

12. (Original) An electrical contact according to claim 8 wherein said plurality of interlaced and annealed wires comprise gaps between adjacent ones of said wires.

13-15. (Cancelled)

16. (Original) A connector system comprising, in combination:
a housing defining a plurality of openings; and
an electrical contact comprising a plurality of interlaced, annealed and unsupported wires disposed in each of said openings.

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17. – 20. (Cancelled)

21. (Original) A method for forming a precursor material for use in manufacturing an electrical contact comprising:
manipulating a plurality of wires so as to interlace said wires into a unitary structure; and
annealing said unitary structure.

22. (Original) A method according to claim 21 wherein said unitary structure is rolled and cut so as to form at least one electrical contact.

23. (Original) A method according to claim 21 wherein said unitary structure is pleated and cut so as to form a plurality of pleated electrical contacts.

24. (Original) A method of forming an electrical contact comprising:
elastically manipulating a plurality of wires so as to interlace said wires into a unitary structure;
rolling a portion of said unitary structure so as to form a tube;
annealing said rolled unitary structure; and
cutting said unitary structure so as to release said tube thereby to form a first electrical contact.

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25. (Original) A method of forming an electrical contact according to claim 22 wherein said rolling of a portion of said unitary structure so as to form a tube and said cutting of said unitary structure so as to release said tube is repeated so as to form a plurality of electrical contacts.

26.- 30. (Cancelled)

31. (Original) An electrical contact formed by the method of claim 24.

32. (Cancelled)

33. (Original) An electrical contact comprising a photo-etched mesh including an array of intersecting annealed beams defining an array of rhomboidally shaped openings.

34. (Original) An electrical contact according to claim 33 having an array of different size rhomboidally shaped openings defined between intersecting annealed beams.

35. (Cancelled)

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36. (Previously Presented) An electrical contact formed by a process comprising (i) interlacing a plurality of conductors so as to form a continuous cylinder wherein said interlaced conductors elastically engage one another so as to be substantially only elastically deformed, (ii) annealing said continuous cylinder so as to substantially eliminate said elastic engagement of said conductors; and (iii) cutting said continuous cylinder so as to form at least one open-ended cylinder.

37. (Previously Presented) A method of forming an open-ended substantially cylindrical electrical contact comprising: (i) interlacing a plurality of conductors so as to form a continuous cylinder wherein said interlaced conductors only elastically engage one another so as to be substantially only elastically deformed, (ii) annealing said continuous cylinder so as to substantially eliminate said elastic engagement of said conductors; and (iii) cutting said annealed continuous cylindrical tube to form at least one open-ended cylinder.

38. (Previously Presented) A method of forming an open-ended substantially cylindrical electrical contact comprising: (i) weaving a plurality of conductors so as to form a continuous cylinder having a longitudinal axis, wherein said woven conductors elastically engage one another so as to be substantially only elastically deformed, (ii) annealing said continuous cylinder so

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as to substantially eliminate said elastic engagement of said conductors, and and
iii) periodically transversely cutting said annealed continuous cylinder to form a
plurality of open-ended cylinders, each having a longitudinal axis, such that
longitudinal deflection of said electrical contact results in substantially only elastic
deformation of said plurality of conductors.

39. (Previously Presented) An open-ended substantially cylindrical
electrical contact comprising a woven plurality of conductors having a longitudinal
axis, wherein said woven conductors comprise an absence of either elastic or
plastic deformations such that longitudinal deflection of said electrical contact
results in substantially only elastic deformation of said plurality of conductors.

40. (Previously Presented) An electrical contact comprising a
woven plurality of conductors having a deflection axis, wherein said woven
plurality of conductors comprise an absence of either elastic or plastic
deformations such that deflection of said electrical contact along said deflection
axis results in substantially only elastic deformation of said plurality of
conductors.

41. (Previously Presented) An open-ended substantially cylindrical
electrical contact comprising a woven plurality of conductors having a longitudinal
axis, wherein said woven conductors comprise an elastically relaxed state such

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that longitudinal deflection of said electrical contact results in substantially elastic deformation of said plurality of conductors.

42. (Previously Presented) An electrical contact comprising a woven plurality of conductors having a deflection axis, wherein said woven plurality of conductors comprise an elastically relaxed state such that defection of said electrical contact along said deflection axis results in only elastic deformation of said plurality of conductors.